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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,287	07/09/2003	Hiroyuki Takahashi	16816	9906

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EXAMINER

JOHNSON III, HENRY M

ART UNIT PAPER NUMBER

3739

DATE MAILED: 01/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/616,287	TAKAHASHI, HIROYUKI	
	Examiner	Art Unit	
	Henry M. Johnson, III	3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2005.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-32 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 21-32 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 21 November 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Applicant's arguments filed 11/21/2005 have been fully considered but they are not persuasive. System claims are based on the structure of the invention. Replacing equipment during a procedure is related to a method of using, not the system structure. A system with identification capability would inherently detect a change in a parameter used in operational decision making.

Drawings

The informal replacement drawings are acknowledged, however, when the application is allowed, applicant will be required to submit new formal drawings.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,117,126 to Applebaum et al. in view of U.S. Patent 6,793,652 to Whitman et al. and further in view of U.S. Patent Application Publication US 2002/0002368 to Tomita et al. Applebaum et al. teach a surgical system with independent microprocessor control of a plurality of surgical instruments with communications between the surgical instruments (abstract). The instruments (Fig. 2, #19) each have a microprocessor interface module (Fig. 2, # 13) connected to a bus for communications to a main computer unit (Fig. 2, # 271). The microprocessors are interpreted as control units. Panel controls or a foot switch (Fig. 2, # 15) may operate the instruments.

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Applebaum et al. teach it may be desirable to prevent certain instruments from operating simultaneously for safety reasons. For example, a phacoemulsification instrument is disabled by the bipolar coagulation instrument when the latter is being used and vice-versa. In contrast, the aspiration function is needed during phacoemulsification or phacofragmentation (Col. 18, lines 10-20). Thus, Applebaum et al. clearly teach a permission/no permission capability. The identification of each module is known to the system as are the operating parameters of the module and its instrument (Col. 20, lines 55-60). The modules and the central computer make up a control device. While Applebaum et al. teach the identification of the instruments by identification of control modules, a dynamic identification is not disclosed. Whitman et al. teach a surgical

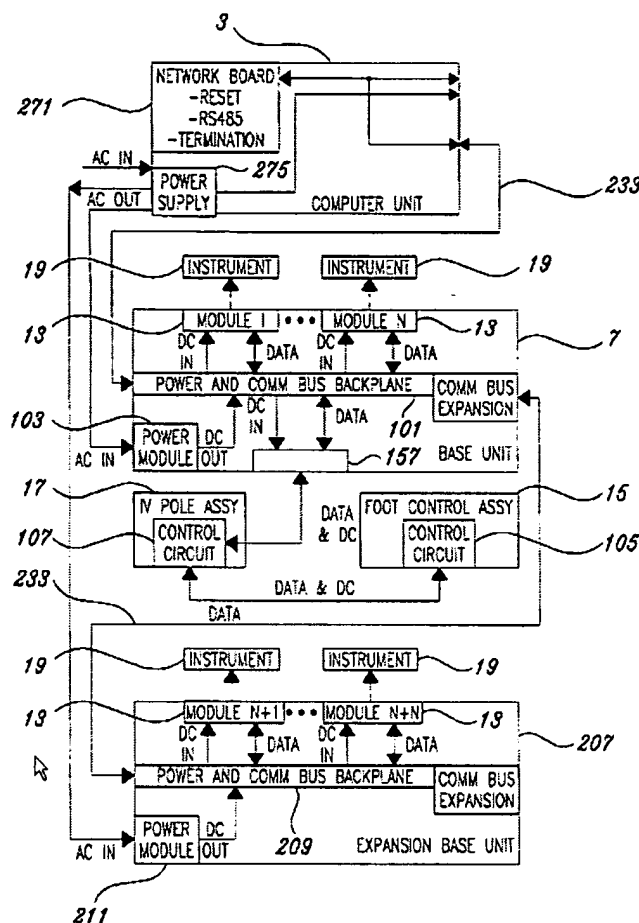


figure 2

system wherein data on the instrument is stored in memory when it is attached (Col. 10, lines 5-15). In addition to the serial number of the instrument, usage data is also provided. Clearly, if an instrument were disconnected or exchanged, the identification information would change, providing new inputs to the control units that determine synchronous operations. It would have been obvious to one having ordinary skill in the art at the time the invention was made to sense the instrument when it is attached as taught by Whitman et al. in the system of Applebaum et al. when instruments are likely to be interchanged or replaced to insure safety of operations. The

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usage parameters included in the Whitman et al. identification information provides ample motivation.

Neither Applebaum et al. nor Whitman et al. teach two foot switches. Tomita et al. disclose two independent surgical instruments, each with its own foot switch and communications between the devices to control the operation of the devices by either foot switch. The use of foot switches is common and pervasive in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use multiple foot switches as taught by Tomita et al. in the invention of Applebaum et al./Whitman et al. as an alternative means of operation, rather than from the console, switches on the handpiece or any of the various means available in the art.

Regarding claim 29, it is inherent switch data is present in order for a decision on simultaneous operation to be made.

Regarding claims 30-32, Applebaum et al. teach controlling instruments such as intraocular pressure (IOP), scissors cutting, forceps control, ultrasound (e.g., for phacoemulsification or phacofragmentation), irrigation, aspiration, vitrectomy cutting, bipolar coagulation and/or illumination.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,117,126 to Applebaum et al. in view of U.S. Patent 6,793,652 to Whitman et al. and further in view of U.S. Patent Application Publication US 2002/0002368 to Tomita et al. as applied to claim 22 above, and further in view of U.S. Patent 5,502,726 to Fischer. Applebaum et al., Whitman et al. and Tomita et al. are discussed above, but do not disclose timeouts. The use of timeout circuits and watchdog timers is well known in the art as evidenced by the Fischer patent that teaches a medical network that uses a watchdog timer (Fig. 5, # 526) to check for timeliness of data transfers and to initiate a program sequence in the event of a timeout.

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Watchdog timers are designed to detect abnormal conditions by looking for a recurring signal. Action is initiated if the signal is not detected. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the timeout circuits as taught by Fischer in the system of Bauer et al. to insure system integrity.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,068,627 to Orszulak et al. teaches identification of specific surgical instruments attached to an electrosurgical source by a unique plug configuration.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

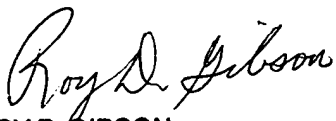
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry M. Johnson, III whose telephone number is (571) 272-4768. The examiner can normally be reached on Monday through Friday from 6:00 AM to 3:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Henry M. Johnson, III
Patent Examiner
Art Unit 3739


ROY D. GIBSON
PRIMARY EXAMINER